DOCUMENT RESUME

ED 245 066 CE 038 995

AUTHOR	Mortensen, Mark A.; Holmes, Dallas L.
TITLE	The Use of the Nominal Group Technique.
INSTITUTION	Utah State Univ., Logan.
SPONS AGENCY	Utah State Board of Education, Salt Lake City. Div. of Adult Education and Training.
PUB DATE	83
NOTE	34p.; For a related document, see CE 038 994.
AVAILABLE FROM	Conference and Institute Division, UMC 50 A, Utah State University, Logan, UT 84322 (Videotape loan charge--$15.00).
PUB TYPE	Guides - Non-Classroom Use (055)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Adult Education; Classroom Techniques; *Discussion (Teaching Technique); *Discussion Groups; *Group Discussion; *Guidelines; Interpersonal Communication; Leaders Guides; Postsecondary Education; *Problem Solving; Teaching Methods; Workshops
IDENTIFIERS	*Nominal Group Technique

ABSTRACT

The Nominal Group Technique (NGT), developed by Andre Delbecq and Andrew Van de Ven at the University of Wisconsin in the 1960s, is used to enhance the generation, exploration, and communication of ideas relevant to problem-solving situations. The NGT is unlike other typical interacting group techniques in that individuals work in the presence of others and do not interact initially but only at specified times. Written syntheses of ideas are generated by each participant and are sequentially shared for group members to view. NGT is, then, a systematic instructional activity that attempts to provide an orderly mechanism for problem solving by obtaining a qualitative measure from group members about their feelings, attitudes, and perceptions of a problem area. This short manual describes the NGT and explains how to put it to use. Sections include the advantages of NGT, applications and constraints to its use, an outline of the six stages of the NGT and a more detailed look at each of these stages (formulating the NGT question, generation of ideas, round robin, discussion, voting, and tabulation), factors circumvented by NGT, and how to set up an NGT meeting. A checklist of materials needed, a bibliography, and suggested readings are included in the guide. (This booklet can be used in conjunction with a separately available videotape.) (KC)

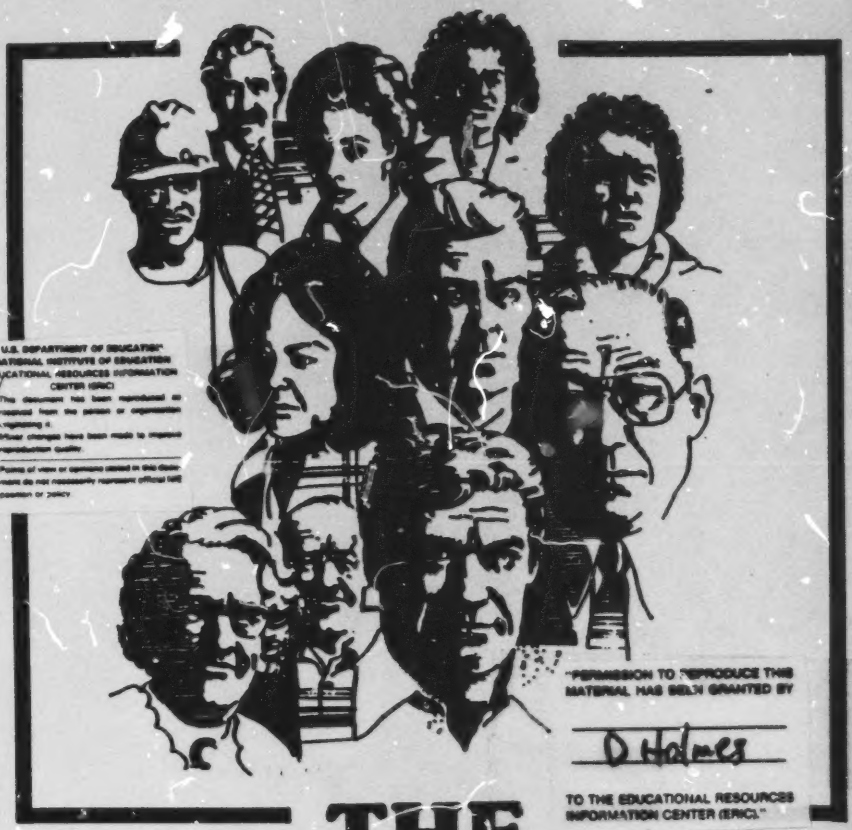
****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED245066

Utah State University

Life Span Learning Programs:

Conference & Institute Division



U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official NIE position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

D Holmes

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

THE USE OF THE NOMINAL GROUP TECHNIQUE

CE 038 995

2

The Use of The Nominal Group Technique

Utah State University
Life Span Learning Programs:

Conference and Institute
Division

Mark A. Mortensen
Dallas L. Holmes

Funded under the
Adult Education Act
PL 91-230
ABE 310

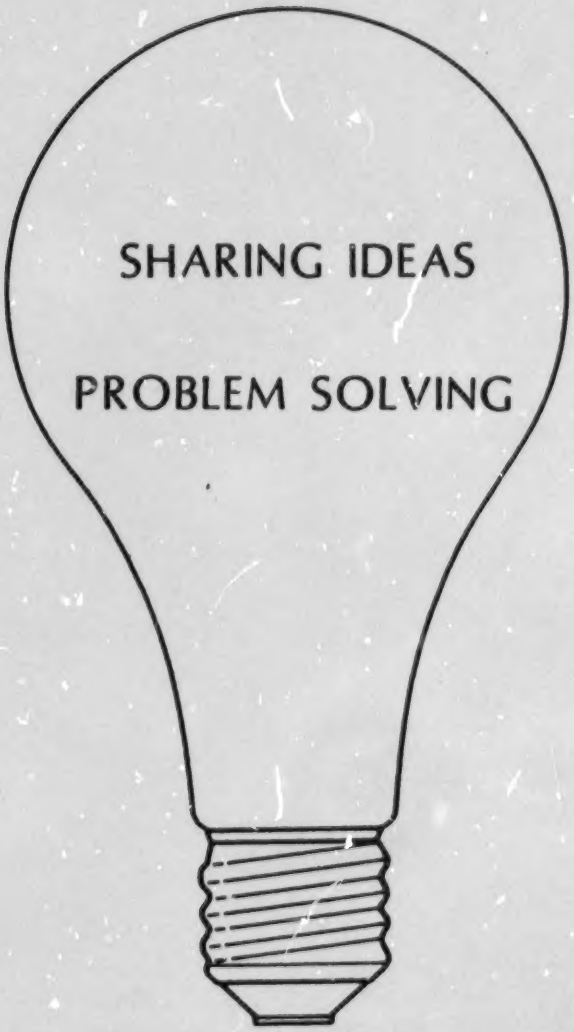
Endorsed by
Utah Community Education Association
Adult Education Association of Utah

ngt

Introduction

In helping adults to learn, there are many instructional techniques which encourage creativity and help to generate new ideas. One such technique which adult educators would find useful for group problem solving was developed in the late 1960's by Andre Delbecq and Andrew Van de Ven at the University of Wisconsin. It is used to enhance the generation, exploration, and communication of ideas relevant to problem-solving situations.

The Nominal Group Technique is unlike other typical interacting group techniques in that individuals work in the presence of others and do not interact initially but only at specified times. Written synthesis of ideas are generated by each participant and are sequentially shared by listing their ideas for members to view. NGT is, then, a systematic instructional activity which attempts to provide an orderly mechanism for problem solving by attaining a qualitative measure from group members about their feelings, attitudes, and perceptions of a problem area.


SHARING IDEAS
PROBLEM SOLVING

Advantages of NGT

NGT, which is a variation of brainstorming, has three distinct advantages as an instructional technique when compared with other interacting group processes such as brainstorming:

1. a greater number of unique ideas

2. the total number of ideas is greater with NGT, and

3. the quality of ideas produced is generally superior.

For all three measures, nominal groups have been found to be significantly superior to brainstorming groups in generating information relative to a problem.

Applications for NGT

Since NGT is a special purpose group process, it may not be appropriate for all group decision-making situations. NGT is intended to be used and works best in situations where the end result requires problem identification, solution exploration, and the setting of priorities where the judgement of several individuals must be brought into a group decision.

Constraints of NGT

Even in these most typical applications for NGT, there are occasions when NGT may not be appropriate. NGT requires a group time commitment of one to two hours to be effective as an instructional technique. There are occasions when a speedier but less precise process might be necessary. It is also imperative that the individuals of the group are familiar with and have an interest in the problem they are about to solve. It may be necessary for the group leader to lead a discussion to clarify the issue before the actual meeting begins.

An Outline of NGT

Stage one of the NGT involves the formulation of the NGT question.

At stage two, the meeting begins with five to eight individuals seated around a table in full view of each other. There is no discussion. Each individual, rather, is asked to list ideas concerning the NGT question on sheets of paper in front of him.

At the end of five to ten minutes, stage three begins during which each individual presents his ideas, one at a time, in a "round robin" manner without discussion. The ideas are fastened to a wall or chalkboard so all can see. Everyone is given equal opportunity to present their ideas. This round robin listing continues until all the ideas have been shared.

In stage four of the NGT meeting, the group discusses each idea and clears any confusion.

During stage five, independent voting takes place. Each member privately selects and ranks what he feels are the best ideas and writes them down.

In stage six, the final stage of the NGT meeting, the group decision is tabulated based on the results of the group's voting as individuals.

ngt

THE STAGES OF NGT
A more detailed account

In order for one to use NGT, the group leader needs to first know how to formulate the NGT question, understand the classroom mechanics of holding an NGT meeting, and recognize the applications in working with adults.

STAGE 1

Stage One: Formulating the NGT Question

Formulating the NGT question is an essential preparatory task. All questions must have three characteristics in order for NGT to work well. The question must be learner centered, must have immediate relevance, and must be properly phrased to assist the learner in understanding its parameters and implications.

A suggested outline to formulate the NGT question involves the following steps:

1. The group decides what its major purposes and goals are in relation to the problem they must solve.
2. The group clarifies the type of ideas or suggestions sought in order to insure that they will fall within the scope of the problem area.
3. The group looks at the development of alternative questions which may help to further focus the NGT question.

Sample NGT Questions

"Identify the major problems which prevent local government representatives from being responsive to the public?"

"Crime in all forms continues to plague our inner metropolitan cities. What might an advisory citizens group do to help stem the tide of the rising crime rate?"

"What issues should be included in a program to educate the public about the drunk driver?"

STAGE 2

Utah State University: Life Span Learning Programs
Conference and Institute Division

Dallas L. Holmes
Mark Allen Mortenson

The Nominal Group Technique

Summary Leadership Guide

REMOVE THIS PAGE FOR YOUR LEADERSHIP GUIDE

Setting up the NGT Meeting

Group Size- Any number of groups of 5 to 8 individuals each.
Approximate Time Required- One to two hours.
Room Arrangement- Tables set up in open "U". Wall space at open end. Space between tables. Any number of tables.
Materials Checklist- Newsprint, felt-tipped markers, masking tape, pencils, 5 x 7 note cards, tables and chairs.

The NGT Process

Formulating the NGT Question-
Define major goals & kind of ideas sought, and consider alternative questions. An essential prepatory task. Must be learner centered, properly phrased, and have immediate relevance.

Silent Generation of Ideas-
Presentation of question with individual response. Provides uninterrupted time to reflect, create, and generate ideas. Avoids focus and closure and eliminates dominance.

"Round Robin" Presentation of Ideas-
Presentation and clarification of ideas without judging, disruption, or discussion. Provides written record. Forces exploration of all ideas.

Discussion-
A paced discussion for clarification & elaboration of ideas. Each item discussed with equal time for each. Support or non-support voiced.

Voting-
Secret vote to prioritize individuals' choice of ten most important items. One is most important, highest number least imporant.

Tabulation-
Secret vote results tabulated to determine group decision. Results reported back to group.
back to group.

Stage Two: Silent Generation

Prior to the start of the NGT session, the NGT group leader presents to the nominal group an overview of the problem and explains that the member's role is to contribute to the definition of the problem. The persons are seated around a table and are given newsprint in pre-cut sheets and a marker.

The group leader presents to the group the NGT question to which each participant is asked to respond in order to define the critical elements of the problem. Without discussion, each member, silently and independently, writes as many ideas related to the question as possible within the specific time pre-determined by the instructor.

The silent generation stage lasts from ten to fifteen minutes. This allows individuals uninterrupted time to reflect, be creative, and generate new ideas. It avoids focusing or closure of any one item and also eliminates dominance of an idea by an individual in the group.

STAGE 3

STAGE 4

Stage Three: "Round Robin"

During the round robin stage, members take turns presenting one idea at a time until all the ideas are listed by the group leader.

Round robin allows each individual equal opportunity to present one's ideas and clarify any confusion about them. However, there is no judging, no disruption, and no long discussion at this stage of NGT. Using this method, ideas can easily be separated from the individual personalities of group members. Round robin also provides a written record and forces one to explore equally all the ideas.

The round robin stage may be eliminated in order to save time when NGT is used with large groups or in situations where the disclosure of ownership of an idea is not desirable.

Stage Four: Discussion

Following the round robin stage, a discussion begins of each recorded idea for further clarification and elaboration. The group leader allows equal time for discussion of the ideas and paces the group. Each item is discussed separately and no items are eliminated from the list except in the event of a duplication. Individuals are free at this point to voice support or non-support of an idea without argumentation.

STAGE 5

Stage Five: Voting

Next, a vote is taken. Each participant, without interaction with others, to eliminate peer pressures, is asked to rank the items listed on the wall in order of priority where one is most important and the highest number represents the least important idea. If more than ten items are to be ranked, assign the most important item with the highest value. This will allow for easier tabulation. Then, the item with the highest average will be the most favorable solution.

Stage Six: Tabulation

Finally, the group decision is tabulated based on the results of the voting of the individuals. The form on the next page suggests one manner in which to tally the ranks assigned by the group.

STAGE 6

TALLY SHEET

Item number	Ranks assigned by participants	Average of ranks
EX.	5, 3, 7, 6, 7	5.6
EX.	1, 3, 1, 2, 4	2.2
1.		
2.		
3.		
4.		

The ranks are recorded for each item or idea number as they were presented by the participants. Then the ranks are averaged. Simply, the item with the lowest average is the most favorable solution. Later all the participants meet together and the results of the group are reported to the entire audience. The group leader leads a discussion and again states that the reason for the experience was to better understand the critical issues of a problem area.

Factors Circumvented by NGT

The nominal group process circumvents many of the inhibitory influences that plague interacting problem-solving groups and, consequently, limit group effectiveness. These liabilities seem to be the result of a variety of factors including the following:

Individual Domination- Dominant personality types unduly influence the group.

Social Pressure for Conformity- Major opinions tend to be accepted even if their objective quality has not been assessed.

Status Incongruities- Low status members are overly influenced.

A "Self-weighing" Effect- An individual's feeling of self-competence determines the amount of his participation.

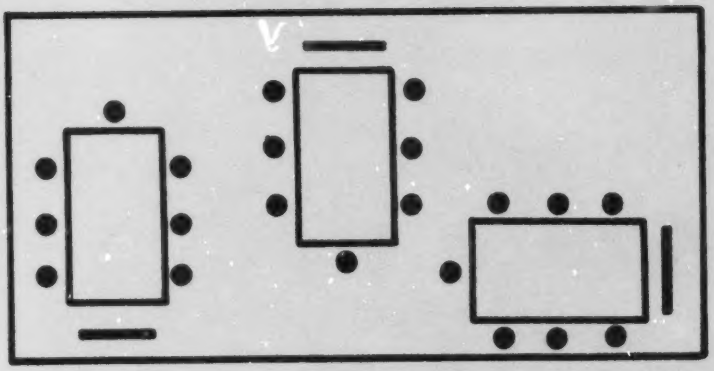
Premature Closure- Interacting groups tend to converge quickly on a decision without considering all the available or relevant information.

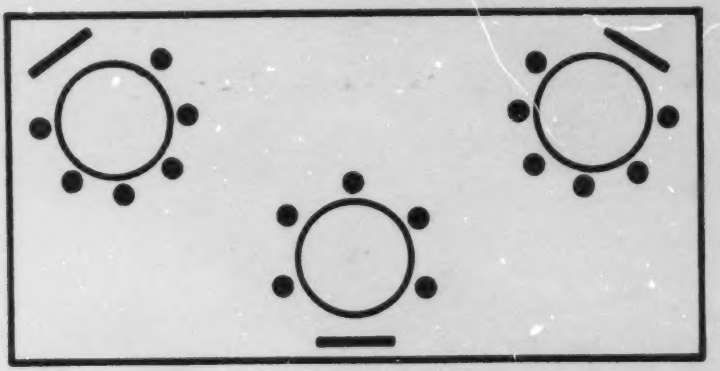
Setting up an NGT Meeting

The NGT meeting consists of any number of groups of five to eight individuals each seated around a table. Each group or each table has a group leader who is responsible for supervising and overseeing the meeting for that group.

The tables should be arranged in an open "U" or in a circle with wall space or a chalkboard at the open end of the table. The wall space will be used to display the ideas as presented by the group.

There should be sufficient space between the tables to avoid interference with one another. The diagram on the next page suggests two ways in which to arrange the room.





Materials Checklist

Newsprint in pre-cut sheets (approx. 10" x 32"), enough for 20 sheets for each participant.
Bold felt-tipped markers, one for each participant.
Masking tape, to affix ideas on newsprint to walls.
3" x 5" or 5" x 7" note cards, one for each participant.
Pencils, one for each participant.
Tables and chairs to accommodate group.
Tabulation sheet.

Bibliography

Delbecq, A.L. & Van de Ven, A.H. & Gustafson, David H. Group Techniques and Program Planning: A Guide to Nominal Group and Delphi Processes Glenview, IL. : Scott, Foresman and Co., 1975

Ford, David, Jr. "Nominal Group Technique: An Applied Group Problem Solving Activity" The 1975 Annual Handbook for Group Facilitators LaJolla, CA. : University Associates Publishers, Inc., 1975: 35-37

Ford, David, Jr. & Nemiroff, Paul M. "Applied Group Problem Solving: The Nominal Group Technique" Found in the same publication as listed above.

Suggested Reading

The Nominal Group Technique, A Health Education Strategy
Laufman, Larry and others
Health Education v12 n1 p17-19 Jan-Feb 1981

Curriculum Development and the Nominal Group Technique: Gaining the Practitioners View
Parr, Ed; Done, Michael
Jrnl. for Education for Librarianship v19 n3 p223-32 Win 1979

Nominal Group Technique: A Process for In-Service and Staff Work
Collison, Brooke B.; Dunlap, Suzanne F.
School Counselor 26, 1, 18-23 Sept 1978

The Nominal Group: A New Tool for Making Social Work Education Relevant
Zastro, Charles; Navarre, Ralphe
Jrnl. of Education for Social Work 13, 1, 112-118 Win 1977

An Application of the Nominal Group Technique in Educational Systems Analysis
Vroman, H. William
Educational Technology 15, 6, 51-53, Jun 1975

Conference & Institute Division